

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application

1. (Currently amended) A multi-particulate pharmaceutical dosage form of a skeletal muscle relaxant providing a modified release profile comprising a population of extended release beads,

wherein said extended release beads comprise

an active-containing core particle comprising a skeletal muscle relaxant selected from the group consisting of cyclobenzaprine, pharmaceutically acceptable salts or derivatives thereof and mixtures thereof; and

an extended release coating comprising a water insoluble polymer membrane surrounding said core,

wherein said dosage form when dissolution tested using United States Pharmacopoeia Apparatus 2 (paddles @ 50 rpm) in 900 mL of 0.1N HCl at 37°C exhibits a drug release profile substantially corresponding to the following pattern:

after 2 hours, no more than about 40% of the total active is released;

after 4 hours, from about 40-65% of the total active is released

after 8 hours, from about 60-85% of the total active is released;

wherein said dosage form provides therapeutically effective plasma concentration over a period of 24 hours to treat muscle spasm associated with painful musculoskeletal conditions when administered to a patient in need thereof; and

wherein said water insoluble polymer membrane comprises a water insoluble polymer selected from the group consisting of ethers of cellulose, esters of cellulose, cellulose acetate, cellulose butyrate, cellulose propionate, ethyl cellulose, mixed cellulose esters, acetylated polysaccharides, polyurethanes, polyacrylate and polymethacrylate polymers and derivatives, waxes, polyvinyl acetate, neutral copolymers based on ethylacrylate and methylmethacrylate, copolymers of acrylic and methacrylic acid esters with quaternary ammonium groups, pH-

insensitive ammonio methacrylic acid copolymers, and mixtures thereof, and a plasticizer selected from the group consisting of triacetin, tributyl citrate, tri-ethyl citrate, acetyl tri-n-butyl citrate, diethyl phthalate, dibutyl sebacate, polyethylene glycol, polypropylene glycol, castor oil, acetylated mono- and di-glycerides and mixtures thereof.

2. (Previously presented) The pharmaceutical dosage form of claim 1, wherein said skeletal muscle relaxant comprises cyclobenzaprine hydrochloride.

3. (Previously Presented) The pharmaceutical dosage form of claim 2 wherein said pharmaceutical dosage form provides a maximum blood plasma concentration (C_{max}) within the range of about 80% to 125% of about 20 ng/mL of cyclobenzaprine HCl and an AUC_{0-168} within the range of about 80% to 125% of about 740 ng·hr/mL and a T_{max} within the range of 80% to 125% of about 7 hours following oral administration of a single 30 mg cyclobenzaprine HCl MR Capsule.

4. (Previously Presented) The pharmaceutical dosage form of claim 3 wherein the adjusted mean ratio of CMR 30 mg/CMR 15 mg is greater than about 2 for each of AUC_{0-168} ($p<0.001$), $AUC_{0-\infty}$ ($p<0.001$), and C_{max} ($p<0.001$).

5. (Canceled).

6. (Previously presented) The pharmaceutical dosage form of claim 1, wherein said dosage form comprises only one extended release bead population.

7-9. (Canceled).

10. (Previously Presented) The pharmaceutical dosage form of claim 1, wherein said water insoluble polymer membrane on the drug cores comprises from about 7% to 12% by weight of the extended release beads.

11. (Currently amended) The pharmaceutical dosage form of claim 71, wherein said extended release coating further comprises a water soluble polymer selected from the group consisting of methylcellulose, hydroxypropylcellulose, hydroxypropyl methylcellulose, polyethylene glycol polyvinylpyrrolidone and mixtures thereof.

12-23. (Canceled)

24. (Previously presented) The pharmaceutical dosage form of claim 1, wherein said skeletal muscle relaxant comprises cyclobenzaprine.

25. (Previously presented) The pharmaceutical dosage form of claim 1, wherein said drug release profile substantially corresponds to the following pattern:

after 2 hours, no more than about 40% of the total active is released;
after 4 hours, from about 40-65% of the total active is released;
after 8 hours, from about 60-85% of the total active is released; and
after 12 hours, from about 75- 85% of the total active is released.

26. (Currently amended) The pharmaceutical dosage form of claim 91, wherein said extended release coating further comprises a water soluble polymer selected from the group consisting of methylcellulose, hydroxypropylcellulose, hydroxypropyl methylcellulose, polyethylene glycol polyvinylpyrrolidone and mixtures thereof.

27. (Currently amended) The pharmaceutical dosage form of claim 71, wherein the water insoluble polymer membrane comprises ethyl cellulose.

28. (Canceled).

29. (Currently amended) The pharmaceutical dosage form of claim 2827, wherein said plasticizer is diethyl phthalate.

30. (Currently amended) The pharmaceutical dosage form of claim 2827, wherein the extended release coating further comprises a water soluble polymer selected from the group consisting of methylcellulose, hydroxypropylcellulose, hydroxypropyl methylcellulose, polyethylene glycol polyvinylpyrrolidone and mixtures thereof.

31. (Previously presented) The pharmaceutical dosage form of claim 29, wherein the extended release coating further comprises a water soluble polymer selected from the group consisting of methylcellulose, hydroxypropylcellulose, hydroxypropyl methylcellulose, polyethylene glycol polyvinylpyrrolidone and mixtures thereof.

32. (Previously presented) The pharmaceutical dosage form of claim 31, wherein the water soluble polymer is hydroxypropyl methylcellulose.

33. (Previously presented) The pharmaceutical dosage form of claim 32, wherein the skeletal muscle relaxant is cyclobenzaprine hydrochloride.

34. (Previously presented) The pharmaceutical dosage form of claim 33, wherein the water insoluble polymer membrane comprises from about 7% to 12% by weight of the extended release beads.

35. (Previously presented) The pharmaceutical dosage form of claim 34, wherein the drug release profile substantially corresponds to the following pattern:

after 2 hours, no more than about 40% of the total active is released;
after 4 hours, from about 40-65% of the total active is released;
after 8 hours, from about 60-85% of the total active is released; and
after 12 hours, from about 75- 85% of the total active is released.

36. (Previously presented) The pharmaceutical dosage form of claim 1, wherein said water insoluble polymer membrane comprises a water insoluble polymer selected from the group consisting of ethers of cellulose, esters of cellulose, pH-insensitive ammonio methacrylic acid copolymers, and mixtures thereof.

37-38. (Canceled).

39. (Previously presented) The pharmaceutical dosage form of claim 36, wherein said extended release coating further comprises a water soluble polymer selected from the group consisting of methylcellulose, hydroxypropylcellulose, hydroxypropyl methylcellulose, polyethylene glycol polyvinylpyrrolidone and mixtures thereof.

40. (Canceled).